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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,242	02/06/2001	Matt Beaumont	07319/096001	4078

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EXAMINER

LAVARIAS, ARNEL C

ART UNIT PAPER NUMBER

2872

DATE MAILED: 04/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/778,242

Applicant(s)

BEAUMONT, MATT

Examiner

Arnel C. Lavarias

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4 and 6-33 is/are pending in the application.
- 4a) Of the above claim(s) 4,6 and 9-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 28 February 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 2/28/03 in Paper No. 10 have been approved.

2. ✓ The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

Figure 1- Reference numerals 9, 13.

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Response to Amendment

3. The amendments to the specification of the disclosure in Paper No. 10, dated 2/28/03, are acknowledged and accepted. In view of these amendments, the objections to the specification in Paper No. 9, dated 12/2/02, are respectfully withdrawn.

4. The cancellation of Claims 3 and 5 in Paper No. 10, dated 2/28/03, is acknowledged and accepted.

5. The amendments to Claim 1 in paper No. 10, dated 2/28/03, are acknowledged and accepted.

Response to Arguments

6. The Applicant argues that Katagiri et al. (U.S. Patent No. 6157025 or '025) fails to teach or reasonably suggest a memory table which includes a list of specified colors, and positions for the specified colors, and wherein said positions include said calibrated data, as recited in newly amended Claim 1. After careful consideration of the teachings in Katagiri et al. ('025), the Examiner agrees, and respectfully withdraws the rejections to Claims 1-3, 5, and 7-8. However, upon further consideration, a new ground(s) of rejection is made as follows.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

8. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Katagiri et al. (U.S. Patent No. 6359724 or '724).

With regard to Claim 1, Katagiri et al. ('724) discloses an apparatus (See for example Figures 1, 2, 4, 6, 14A, 14B, 15), comprising an optical device (See 3 in Figure 1)

including an optical filter having characteristics that vary across a gradient axis thereof

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(See 31 in Figure 4; 40 in Figure 5; Figures 14A, 14B); and a memory unit (See 10 in Figure 1), storing calibration data for the specific optical filter, which calibration data relates to optical characteristics which are individual to the specific optical filter in said optical device, and which affects the way said optical filter is used (See col. 15, line 38-col. 16, line 18). Katagiri et al. ('724) also discloses the apparatus further comprising a filter moving element (See 20 in Figure 4), which moves said filter to change a position of the gradient axis that intersects said optical axis and thereby change a characteristic of filtering, wherein said filter moving element is responsive to said calibration data (See col. 16, lines 19-65). Katagiri et al. ('724) also discloses the filter moving element including a motor (See 20 in Figure 4), and servo electronics driving the motor (See 8(9) and 32a in Figure 4), said servo electronics including a memory table which includes a list of specified colors, and positions for the specified colors, and said positions include said calibration data (See col. 16, lines 19-65).

With regard to Claim 2, Katagiri et al. ('724) discloses the apparatus further comprising an optical source (See 1 in Figure 1; Figure 4), producing optical energy along an optical axis thereof, said optical axis intersecting said gradient axis of said optical filter (See intersection of incident light and filter 31 in Figure 4).

9. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Mactaggart.

With regard to Claim 1, Mactaggart discloses an apparatus (See for example Figures 1, 2, 4, 6), comprising an optical device (See 24 in Figure 1) including an optical filter having characteristics that vary across a gradient axis thereof (See 24 and 28 in Figure 1; Figure 4); and a memory unit (See 132, 134, 140, 142 in Figure 6), storing calibration

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data for the specific optical filter, which calibration data relates to optical characteristics which are individual to the specific optical filter in said optical device, and which affects the way said optical filter is used (See col. 4, line 50-col. 5, line 33; col. 6, line 55-col. 7, line 19). Mactaggart also discloses the apparatus further comprising a filter moving element (See 26 in Figure 1), which moves said filter to change a position of the gradient axis that intersects said optical axis and thereby change a characteristic of filtering, wherein said filter moving element is responsive to said calibration data (See col. 4, line 50-col. 5, line 33; col. 6, line 55-col. 7, line 19). Mactaggart also discloses the filter moving element including a motor (See 26 in Figure 1), and servo electronics driving the motor (See 152 in Figures 1 and 6; 148, 130, 134, 132, 140, 142 in Figure 6), said servo electronics including a memory table which includes a list of specified colors, and positions for the specified colors, and said positions include said calibration data (See col. 4, line 50-col. 5, line 33; col. 6, line 55-col. 7, line 19).

With regard to Claim 2, Mactaggart discloses the apparatus further comprising an optical source (See 18 in Figure 1), producing optical energy along an optical axis thereof, said optical axis intersecting said gradient axis of said optical filter (See intersection of incident light and filter 28 in Figure 1).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katagiri et al. ('724) in view of So.

Katagiri et al. ('724) discloses the invention as set forth above in Claims 1-2, except for the calibration data including a table of points indicating a 50% position in a cut on curve. However, So teaches an optical wavelength measurement system for a dielectric filter (See for example Figures 3-5) wherein transmission data from an interference filter is measured and stored as calibration data in, for example, a look up table in computer memory (See col. 3, line 62-col. 6, line 65). It is noted that although all wavelength positions in the transmission data are stored, choosing the wavelength position to be a 50% position in the transmission data to represent a particular interference filter is an obvious variant since all the positions in the transmission data is stored and any one of these positions may be used to represent the interference filter. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the calibration data include a table of points indicating a 50% position in a cut on curve, as taught by So, in the apparatus as disclosed by Katagiri et al. ('724). One would have been motivated to do this to provide higher accuracy wavelength value for the interference filters used in the apparatus.

12. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mactaggart in view of So.

Mactaggart discloses the invention as set forth above in Claims 1-2, except for the calibration data including a table of points indicating a 50% position in a cut on curve.

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However, So teaches an optical wavelength measurement system for a dielectric filter (See for example Figures 3-5) wherein transmission data from an interference filter is measured and stored as calibration data in, for example, a look up table in computer memory (See col. 3, line 62-col. 6, line 65). It is noted that although all wavelength positions in the transmission data are stored, choosing the wavelength position to be a 50% position in the transmission data to represent a particular interference filter is an obvious variant since all the positions in the transmission data is stored and any one of these positions may be used to represent the interference filter. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the calibration data include a table of points indicating a 50% position in a cut on curve, as taught by So, in the apparatus as disclosed by Mactaggart. One would have been motivated to do this to provide higher accuracy wavelength value for the interference filters used in the apparatus.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 703-305-4007. The examiner can normally be reached on M-F 8:30 AM - 5 PM EST.

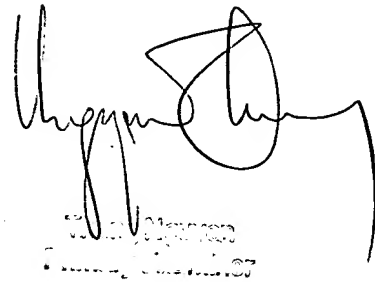
The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.



Arnel C. Lavarias
April 2, 2003



Arnel C. Lavarias
April 2, 2003